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HANDBOOK SERIES
in
ZOOONOSES

JAMES H. STEELE
EDITOR-IN-CHIEF

SECTION B: VIRAL ZOOONOSES
VOLUME I

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CRC PRESS

CRC Handbook Series in Zoonoses

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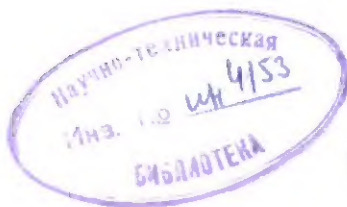
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CRC Press, Inc.
Boca Raton, Florida

1981 2.

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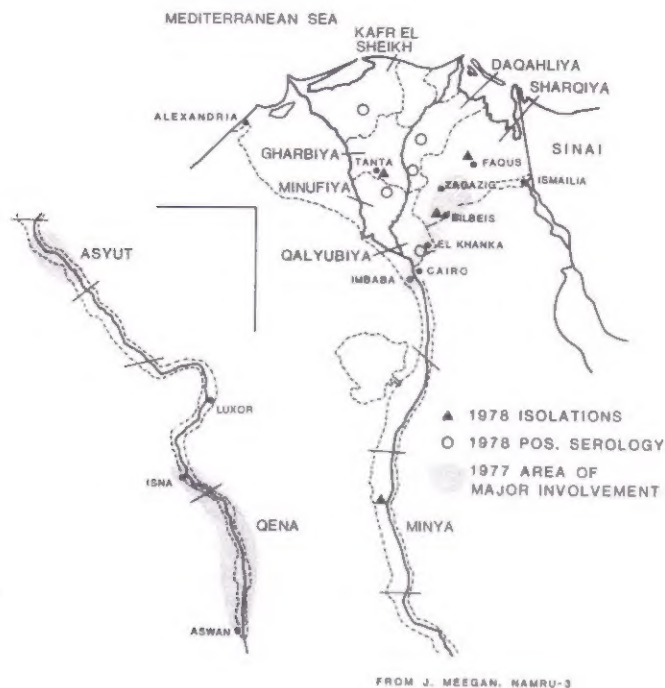


FIGURE 1. Distribution of Rift Valley fever in Egypt in the 1977 to 1978 outbreaks.

piens is the most prevalent species. RVF virus has been isolated from wild-caught *C. pipiens* and transmitted by a laboratory strain.⁸¹

Arthropods undoubtedly act as the main vector of the disease among animals. However, in addition to biological transmission of the virus after replication in an arthropod, the unusually high RVF viremias in a number of hosts suggest that any hematophagous arthropod might mechanically transmit the virus. This possibility, and the role of other arthropods, such as *Culicoides*⁸³ and *Simulium*,⁵ is in need of definitive investigation. In some experimental situations, transmission of the disease from sheep to sheep has occurred, but careful documentation of the presence of virus in saliva or excrement is still needed; the role of such contact transmission in the field is probably negligible.^{1,12,41}

Observations by a number of South African investigators suggest that the primary means of virus transmission to man is contact with infected animal tissues during slaughter, food preparation, necropsy, or laboratory studies.^{4,5,41,54} This viewpoint is supported by studies showing infection of experimental animals through skin abrasions, and by numerous case reports of veterinarians contracting the disease 2 to 4 days after performing a postmortem examination.^{1,57} In the Egyptian epizootic, arthropod transmission of the disease to man was thought to have occurred, and it appears that contact with infected meat and, to a lesser extent, aerosols also were means of transmission of the virus to man.⁸¹ Patient-to-patient transmission has not been demonstrated, although virus is present in blood and saliva. In most laboratories that have studied RVF virus, uncomplicated laboratory-acquired infections, probably from aerosol, have been common.

Reservoirs

Several investigations on the natural reservoirs of RVF in East Africa have been